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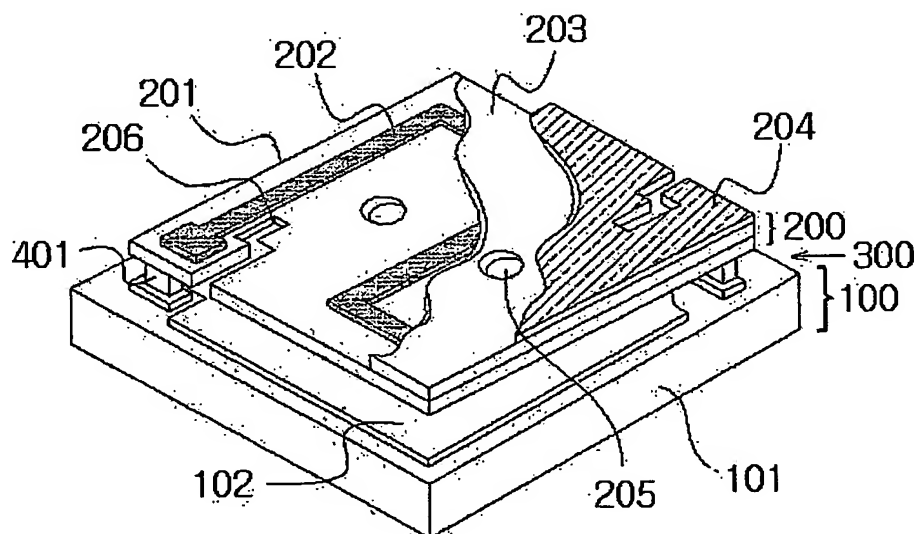
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| <p><b>(51) International Patent Classification<sup>7</sup>:</b><br/>G01J 1/02</p> <p><b>(21) International Application Number:</b><br/>PCT/KR2004/002294</p> <p><b>(22) International Filing Date:</b><br/>9 September 2004 (09.09.2004)</p> <p><b>(25) Filing Language:</b><br/>Korean</p> <p><b>(26) Publication Language:</b><br/>English</p> <p><b>(30) Priority Data:</b><br/>10-2003-0070410      9 October 2003 (09.10.2003)      KR<br/>10-2004-0061285      4 August 2004 (04.08.2004)      KR<br/>10-2004-0070714<br/>6 September 2004 (06.09.2004)      KR</p> <p><b>(71) Applicant (for all designated States except US):</b> OCAS CORP. [KR/KR]; Rm206P1-Dong, KyonggiTechnoPark, 1271-11 Sa-dong, Ansan, Gyeonggi-do 426-170 (KR).</p> | <p><b>(72) Inventors; and</b><br/><b>(75) Inventors/Applicants (for US only):</b> LEE, Hong-Ki [KR/KR]; 310-201 Hyojachon, 292 Seohyun-dong, Bundang-gu, Seongnam-si, Kyonggi-do 463-766 (KR). IM, Young-Geun [KR/KR]; #201 Seongjun terrace house., Yeokgok 2-dong, 30-1 Wonmi-gu, Bucheon-si, Gyeonggi-do 420-832 (KR).</p> <p><b>(74) Agent:</b> SEO, Cheon-Seok; Seo International Law And Patent Office, 8th Floor KAIS system Bldg, 1657-5 Seocho-dong Seocho-gu, Seoul 137-070 (KR).</p> <p><b>(81) Designated States (unless otherwise indicated, for every kind of national protection available):</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.</p> <p><b>(84) Designated States (unless otherwise indicated, for every kind of regional protection available):</b> ARIPO (BW, GH,</p> |
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**(54) Title: BOLOMETRIC INFRARED SENSOR HAVING TWO LAYER STRUCTURE AND METHOD FOR MANUFACTURING THE SAME**



**(57) Abstract:** The present disclosure is related to bolometric infrared sensors having a two-layer structure and methods for manufacturing the same for improving an absorption rate by a spectroscopic design for resonantly absorbing infrared, and preventing the deformation of a sensor caused by stresses due to heat. The infrared sensor including an ROIC substrate and several pixels, comprises: a bottom layer including a reflective metal layer on the ROTC substrate; a cavity for resonantly absorbing infrared ray over the bottom layer; an upper layer of a sandwich shape including an absorption-transmission layer having a cutting area in the middle thereof and a bolometer layer placed both on and under the absorption-transmission layer; and anchors positioned at the edges of the pixel for supporting the upper layer and functioning as electrodes.

**WO 2005/034248 A1**



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